

Amendments to the Claims

1-35. (Cancelled)

36. (Currently amended) An isolated antibody which specifically binds to a matrix metalloproteinase (MMP) protein or a salt of said MMP protein, or a partial peptide of said MMP protein or a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 ~~which are characteristic of said MMP protein.~~

37. (Previously presented) The antibody according to claim 36, wherein said matrix metalloproteinase protein or salt thereof further comprises the peptide fragment Ala⁵⁶⁴ to Phe⁵⁸⁷ of SEQ ID No: 2, said Ala⁵⁶⁴ to Phe⁵⁸⁷ fragment being located at or near the C-terminal of the protein.

38. (Previously presented) The antibody according to claim 36, wherein said matrix metalloproteinase protein or salt thereof comprises the amino acid sequence as set forth in SEQ ID No: 2.

39-40. (Cancelled)

41. (Previously presented) The antibody according to claim 36, wherein the antibody specifically binds against said partial peptide or salt thereof.

42. (Previously presented) The antibody according to claim 36, wherein the antibody is polyclonal.

43. (Previously presented) The antibody according to claim 36, wherein the antibody is monoclonal.

44. (Previously presented) The antibody according to claim 36, wherein the antibody is labeled.

45. (Currently amended) A method for producing an antibody, which comprises:

immunizing an animal with an antigen selected from the group consisting of a matrix metalloproteinase (MMP) protein ~~or~~ , a salt of said MMP protein, ~~or~~ a partial peptide of said MMP protein ~~or~~ , and a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 ~~which are characteristic of said MMP protein~~, and isolating an antibody which specifically binds to said antigen.

46. (Currently amended) A method for producing an antibody, which comprises: immunizing an animal with an antigen selected from the group consisting of a matrix metalloproteinase (MMP) protein ~~or~~ , a salt of said MMP protein, ~~or~~ a partial peptide of said MMP protein ~~or~~ , and a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 ~~which are characteristic of said MMP protein~~, to obtain an antibody-producing cell which produces an antibody which specifically binds to said antigen,

fusing said antibody-producing cell with an immortal cell, and
selecting an immortal hybrid cell which produces a monoclonal antibody which specifically
binds to said antigen.

47. (Currently amended) A method for detecting and/or measuring a matrix metalloproteinase protein or salt thereof, which comprises:
contacting a test sample with an antibody which specifically binds to a matrix metalloproteinase (MMP) protein or a salt of said MMP protein, or a partial peptide of said MMP protein or a salt of said partial peptide, said matrix metalloproteinase protein or salt thereof comprising the following peptide fragments of SEQ ID No: 2: (a) Gly¹⁰⁹ to Arg¹¹⁹, (b) Pro¹⁷¹ to Gly¹⁷⁸, (c) Thr²²⁹ to Leu²⁴² and (d) Asp⁵³³ to Val⁶⁰⁷, said matrix metalloproteinase protein having a maximum molecular weight of approximately 69kDa and is a pro MMP-2 activating factor, said partial peptide or salt thereof comprising continuous antigenic amino acid residues of SEQ ID No: 2 ~~which are characteristic of said MMP protein~~, and
detecting and/or measuring the matrix metalloproteinase protein or salt thereof bound to the antibody.

48. (Previously presented) The method according to claim 47, wherein the antibody is labelled.

49. (Previously presented) The antibody according to claim 36, wherein said partial peptide or salt thereof comprises SEQ ID NO: 5, 6, 7 or 8.

50. (Cancelled)

51. (Previously presented) The antibody according to claim 36, which is produced using a partial peptide of said matrix metalloproteinase protein selected from the group consisting of SEQ ID NOS: 5, 6, 7 and 8.

52. (Previously presented) The antibody according to claim 36, which is not crossreactive with any one of the matrix metalloproteinase (MMP) protein selected from the group consisting of MMP-1, MMP-2, MMP-3, MMP-7, MMP-8 and MMP-9.

53. (Currently amended) The antibody according to claim 36, wherein said partial peptide or salt thereof comprises at least 8 continuous antigenic amino acid residues of SEQ ID No: 2 ~~which are characteristic of said MMP protein.~~